

**ABSTRACT**

The invention pertains to a layered ammonia oxidation catalyst. The layered  
5 catalyst causes ammonia to be selectively oxidized in the presence of an oxidant such as  
air, while minimizing the formation of nitrogen oxides ( $\text{NO}_x$ ). The layered catalyst  
comprises a refractory oxide support such as gamma alumina upon which a platinum  
component is deposited and a vanadia component is deposited on the platinum. The  
catalyst is preferably disposed on a substrate such as a metal foil whose surface contains  
10 a "herringbone" pattern.